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FILE LAST UPDATED: 14 Oct 2001  (20011014/ED)

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=> d stat que
L1          510 SEA FILE=REGISTRY OUTER MEMBRANE PROTEIN?/CN
L2           30 SEA FILE=REGISTRY NUCLEIC ACID?/CN
L3           98 SEA FILE=REGISTRY ANTIBOD?/CN
L5            1 SEA FILE=REGISTRY ANTIBOD?(L)POLYCLONAL?
L6          521 SEA FILE=REGISTRY ("CHLAMYDIA TRACHOMATIC MAJOR OUTER MEMBRANE
                PROTEIN FRAGMENT"/CN OR "CHLAMYDIA TRACHOMATIS MJOR OUTER
                MEMBRANE PROTEIN HELPER T CELL EPITOPE"/CN) OR L1
L7         4972 SEA FILE=REGISTRY CHLAMYDIA(L)PNEUMONIAE NOT L6
L8         7910 SEA FILE=HCAPLUS L6 OR (OUTER(W)MEMBRANE?)(5A)PROTEIN? OR OMP
L9        25882 SEA FILE=HCAPLUS L7 OR CHLAMYDIA OR PNEUMONI?
L10         658 SEA FILE=HCAPLUS L8(L)L9
L11      621758 SEA FILE=HCAPLUS L5 OR ANTIBOD? OR L3 OR POLYCLONAL OR PAB# OR
                MAB# OR AB# OR MONOCLONAL
L13         309 SEA FILE=HCAPLUS L10 AND L11
L14      112454 SEA FILE=HCAPLUS NUCLEIC(W)ACID? OR L2
L15          26 SEA FILE=HCAPLUS L13 AND L14


=> d ibib abs hitrn l15 1-26

L15  ANSWER 1 OF 26  HCAPLUS  COPYRIGHT 2001 ACS
ACCESSION NUMBER:        2001:598462  HCAPLUS
DOCUMENT NUMBER:         135:177709
TITLE:                   Treatment and diagnosis of Alzheimer's disease with
                         anti-Chlamydia pneumoniae agents
```

INVENTOR(S): Balin, Brian J.; Abrams, J. Todd; Hudson, Alan P.; Whittum-Hudson, Judith A.
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 42 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| US 2001014670 | A1 | 20010816 | US 1999-227749 | 19990108 |
| | | | US 1998-70855 P | 19980109 |

PRIORITY APPLN. INFO.:

AB The invention relates to a method of treating Alzheimer's disease in a mammal comprising administering to the mammal an anti-microbial agent having anti-Chlamydia pneumoniae activity. The invention also relates to a method of diagnosing Alzheimer's disease in a mammal comprising measuring the serum anti-Chlamydia pneumoniae **antibody** titer in a patient suspected of having Alzheimer's disease (AD). Immunohistochem. anal. of tissues from affected regions of AD brains and congruent regions from non-AD control brains was performed to identify specific area(s) and host cell types within which the bacterium resides. Immunohistochem. anal. confirmed the presence of C. pneumoniae in affected AD brain regions and localized the bacterium to non-neuronal cells. At least three cell types, astroglia, microglia, and pericytes, were shown to harbor C. pneumoniae in the AD brain.

L15 ANSWER 2 OF 26 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 2001:507733 HCAPLUS
DOCUMENT NUMBER: 135:103459
TITLE: Sequence of novel Actinobacillus pleuropneumoniae outer membrane protein fragment, and therapeutic and diagnostic uses thereof
INVENTOR(S): Haesebrouck, Freddy; Ducatelle, Richard; Chiers, Koen; Van Overbeke, Ingrid
PATENT ASSIGNEE(S): Universiteit Gent, Belg.
SOURCE: PCT Int. Appl., 37 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2001049722 | A2 | 20010712 | WO 2000-EP13305 | 20001228 |

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,

DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

EP 1113074 A1 20010704 EP 1999-204612 19991230

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO

PRIORITY APPLN. INFO.: EP 1999-204612 A 19991230
US 2000-176120 P 20000114

AB The invention provides the N-terminal amino acid sequence of a novel Actinobacillus pleuropneumoniae (A. plpn) outer membrane protein. The protein of the invention has a mol. wt. of about 55 kDa and is involved in adhesion of A. plpn to swine alveolar epithelial cells. The invention also provides immunogenic fragments of the outer membrane protein. The invention further provides **nucleic acids** encoding said proteins, and the use of both types of mols. for the diagnosis, treatment, and prevention of pleuropneumoniae infections in pigs is also within the scope of the invention.

L15 ANSWER 3 OF 26 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 2001:488672 HCAPLUS
DOCUMENT NUMBER: 135:91518
TITLE: Actinobacillus pleuropneumoniae outer membrane protein and its use
INVENTOR(S): Haesebrouck, Freddy; Ducatelle, Richard; Chiers, Koen; Van Overbeke, Ingrid
PATENT ASSIGNEE(S): Universiteit Gent, Belg.
SOURCE: Eur. Pat. Appl., 24 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| EP 1113074 | A1 | 20010704 | EP 1999-204612 | 19991230 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO | | | | |
| WO 2001049722 | A2 | 20010712 | WO 2000-EP13305 | 20001228 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |

PRIORITY APPLN. INFO.: EP 1999-204612 A 19991230
US 2000-176120 P 20000114

AB The present invention relates to a new purified immunogenic Actinobacillus pleuropneumoniae outer membrane protein of mol. wt. of about 55 kDa and having an N-terminal sequence. The invention also relates to **nucleic acids** encoding said protein and the use of both types of mols. for the treatment and prevention of pleuropneumonia

infections in pigs. The present invention also relates to the combined use of a recombinant Actinobacillus pleuropneumoniae vaccine strain for use in vaccination, and a polypeptide for use in a diagnostic method.

L15 ANSWER 4 OF 26 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 2001:472750 HCAPLUS
DOCUMENT NUMBER: 135:75735
TITLE: **Chlamydia outer membrane protein** and corresponding DNA fragments and uses thereof
INVENTOR(S): Murdin, Andrew D.; Oomen, Raymond P.; Wang, Joe; Dunn, Pamela
PATENT ASSIGNEE(S): Aventis Pasteur Ltd., Can.
SOURCE: PCT Int. Appl., 74 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2001046225 | A2 | 20010628 | WO 2000-CA1535 | 20001220 |

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 1999-171539 P 19991222

AB The present invention provides a method of **nucleic acid**, including DNA, immunization of a host, including humans, against disease caused by infection by a strain of **Chlamydia**, specifically C. **pneumoniae**, employing a vector contg. a nucleotide sequence encoding an **outer membrane protein** of a strain of **Chlamydia pneumoniae** and a promoter to effect expression of the **outer membrane protein** in the host. Modifications are possible within the scope of this invention.

IT **223702-08-7**
RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
(amino acid sequence; recombinant **Chlamydia pneumoniae outer membrane protein** and gene for diagnosis, prevention and treatment of **Chlamydia** infection)

IT **346742-56-1**
RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
(nucleotide sequence; recombinant **Chlamydia pneumoniae outer membrane protein**

and gene for diagnosis, prevention and treatment of **Chlamydia** infection)

L15 ANSWER 5 OF 26 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 2001:472749 HCAPLUS
DOCUMENT NUMBER: 135:75734
TITLE: **Chlamydia omp** P6 precursor protein and corresponding DNA fragments and uses thereof
INVENTOR(S): Murdin, Andrew D.; Oomen, Raymond P.; Wang, Joe; Dunn, Pamela
PATENT ASSIGNEE(S): Aventis Pasteur Limited, Can.
SOURCE: PCT Int. Appl., 74 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2001046224 | A2 | 20010628 | WO 2000-CA1534 | 20001220 |

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 1999-171525 P 19991222

AB The present invention provides a method of **nucleic acid**, including DNA, immunization of a host, including humans, against disease caused by infection by a strain of **Chlamydia**, specifically C. **pneumoniae**, employing a vector contg. a nucleotide sequence encoding an **omp** P6 precursor of a strain of **Chlamydia pneumoniae** and a promoter to effect expression of the **omp** P6 precursor in the host. Modifications are possible within the scope of this invention.

IT **223708-41-6P**
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(amino acid sequence; recombinant **Chlamydia pneumoniae omp** P6 precursor protein and gene for diagnosis and treatment of **Chlamydia** infection)

IT **346741-64-8P**
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(nucleotide sequence; recombinant **Chlamydia pneumoniae omp** P6 precursor protein and gene for diagnosis and treatment of **Chlamydia** infection)

L15 ANSWER 6 OF 26 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 2001:255245 HCAPLUS
DOCUMENT NUMBER: 134:265146
TITLE: Cloning and characterization of outer membrane protein OMP106 gene of Moraxella catarrhalis and its prophylactic, diagnostic and therapeutic uses
INVENTOR(S): Tucker, Kenneth; Plosila, Laura; Tillman, Ulrich F.
PATENT ASSIGNEE(S): Antex Biologics Inc., USA
SOURCE: U.S., 49 pp., Cont.-in-part of U.S. Ser. No. 642,712.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| US 6214981 | B1 | 20010410 | US 1997-968685 | 19971112 |
| CN 1223549 | A | 19990721 | CN 1997-195990 | 19970428 |

PRIORITY APPLN. INFO.: US 1996-642712 A2 19960503

AB The invention discloses the Moraxella catarrhalis outer membrane protein-106 (OMP106) polypeptide, polypeptides derived therefrom (OMP106-derived polypeptides), nucleotide sequences encoding these polypeptides, and **antibodies** that specifically bind the OMP106 polypeptide and/or OMP106-derived polypeptides. Also disclosed are immunogenic, prophylactic or therapeutic compns., including vaccines, comprising OMP106 polypeptide and/or OMP106-derived polypeptides. The invention addnl. discloses methods of inducing immune responses to M. catarrhalis and M. catarrhalis OMP106 polypeptides and OMP106-derived polypeptides in animals.

REFERENCE COUNT: 21
REFERENCE(S):
(1) Aebi; Infection & Immunity 1997, V65, P4367 HCAPLUS
(2) Anon; WO 9634960 1996 HCAPLUS
(3) Bartos; J Infect Dis 1988, V158, P761 HCAPLUS
(4) Bogosian; Gene 1993, V133, P17 HCAPLUS
(5) Helminen; Infect Immun 1993, V61, P2003 HCAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 7 OF 26 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 2001:229055 HCAPLUS
DOCUMENT NUMBER: 134:251203
TITLE: Cloning and expression of serine-threonine kinase (STK) gene of Chlamydia for immunization against infections
INVENTOR(S): Brunham, Robert C.
PATENT ASSIGNEE(S): University of Manitoba, Can.
SOURCE: PCT Int. Appl., 26 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2001021811 | A1 | 20010329 | WO 2000-CA1097 | 20000921 |

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 1999-401780 A 19990922

AB **Nucleic acid**, including DNA, immunization is used to generate a protective immune response in a host, including humans, to a serine-threonine kinase (STK) of a strain of Chlamydia. A non-replicating vector, including a plasmid vector, contains a nucleotide sequence encoding an STK or a fragment of the STK that generates **antibodies** that specifically react with STK and a promoter sequence operatively coupled to the first nucleotide sequence for expression of the STK in the host. The non-replicating vector may be formulated with a pharmaceutically-acceptable carrier for in vivo administration to the host.

REFERENCE COUNT: 3

REFERENCE(S):

(1) Holzman, L; JOURNAL OF BIOLOGICAL CHEMISTRY 1994, V269(49), P30808 HCAPLUS

(2) Stephens, R; SCIENCE 1998, V282(5389), P754 HCAPLUS

(3) Univ Manitoba; WO 9802546 A 1998 HCAPLUS

L15 ANSWER 8 OF 26 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 2001:229049 HCAPLUS

DOCUMENT NUMBER: 134:248622

TITLE: Sequences of **Chlamydia pneumoniae outer membrane protein OMP**, and their diagnostic and therapeutic uses

INVENTOR(S): Murdin, Andrew D.; Oomen, Raymond P.; Wang, Joe; Dunn, Pamela

PATENT ASSIGNEE(S): Aventis Pasteur Limited, Can.

SOURCE: PCT Int. Appl., 82 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2001021804 | A1 | 20010329 | WO 2000-CA1088 | 20000915 |

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN,

YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
PRIORITY APPLN. INFO.: US 1999-154652 P 19990920

AB The invention provides protein and DNA sequences of full-length **outer membrane protein OMP** of **Chlamydia pneumoniae**. The present invention also relates to immunization of a host, including humans, against disease caused by infection by a strain of **Chlamydia**, specifically C. **pneumoniae**, employing a vector contg. a **Chlamydia** protein gene and a promoter to effect expression of the **outer membrane protein OMP** gene in the host.

IT **223708-74-5P**
RL: BAC (Biological activity or effector, except adverse); BOC (Biological occurrence); BPN (Biosynthetic preparation); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation); USES (Uses)
(amino acid sequence; sequences of **Chlamydia pneumoniae outer membrane protein OMP**, and their diagnostic and therapeutic uses)

IT **331286-16-9**
RL: BOC (Biological occurrence); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); USES (Uses)
(nucleotide sequence; sequences of **Chlamydia pneumoniae outer membrane protein OMP**, and their diagnostic and therapeutic uses)

REFERENCE COUNT: 2
REFERENCE(S): (1) Genset Sa; WO 9927105 A 1999 HCAPLUS
(2) Madsen, A; WO 9858953 A 1998 HCAPLUS

L15 ANSWER 9 OF 26 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 2000:691928 HCAPLUS
DOCUMENT NUMBER: 135:902
TITLE: Chlamydia pneumoniae DNA in non-coronary atherosclerotic plaques and circulating leukocytes
AUTHOR(S): Berger, Mario; Schroder, Babette; Daeschlein, Georg; Schneider, Wolfgang; Busjahn, Andreas; Buchwalow, Igor; Luft, Friedrich C.; Haller, Hermann
CORPORATE SOURCE: Franz Volhard Clinic and Max Delbruck Center for Molecular Medicine, Humboldt University, Berlin, 13122, Germany
SOURCE: J. Lab. Clin. Med. (2000), 136(3), 194-200
CODEN: JLCMAK; ISSN: 0022-2143
PUBLISHER: Mosby, Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Earlier studies have assocd. atherosclerosis with **Chlamydia pneumoniae** infection. C. **pneumoniae** may circulate via monocytes and migrate into plaques by leukocyte infiltration; however, detection is difficult. We developed a novel polymerase chain reaction (PCR) method to test the hypothesis that C. **pneumoniae** DNA in circulating leukocytes is correlated with C. **pneumoniae** DNA in plaque material and that C. **pneumoniae** copy no. is assocd. with

disease severity. We obtained plaques from 130 patients who underwent surgery for carotid stenosis, aneurysm, or peripheral vascular disease. From 60 patients and 51 normal control subjects we also obtained circulating leukocytes. The C. **pneumoniae** 16 S rRNA gene was amplified with a highly specific quant. PCR protocol relying on the TaqMan technol. Immunohistochem. was performed with **antibody** against the C. **pneumoniae outer membrane protein**. C. **pneumoniae** DNA was present in 25% of atherosclerotic plaques and 20% of circulating leukocytes from patients. The copy no. was not correlated with disease severity. C. **pneumoniae** DNA was more common in younger patients and smokers. C. **pneumoniae antibody** titers, C-reactive protein, fibrinogen, leukocyte count, cholesterol, and diabetes were not assocd. with C. **pneumoniae** DNA. Although immunostaining of plaque and PCR results were highly correlated, we found no relationship between C. **pneumoniae** DNA in plaques and that in circulating leukocytes. Finally, 13% of normal control subjects had pos. leukocytes; however, their copy no. was significantly lower than that of the patients. C. **pneumoniae** DNA is frequent in atherosclerotic plaques and is correlated with pos. immunohistochem. C. **pneumoniae** DNA may also be found in circulating leukocytes; however, infected leukocytes and plaques do not coincide. Serol. is unreliable in predicting C. **pneumoniae** DNA. Smoking increases the risk of harboring C. **pneumoniae** DNA. Our results do not suggest that either test for **antibodies** or C. **pneumoniae** DNA from leukocytes in blood is of value in predicting infected plaques.

REFERENCE COUNT: 35
REFERENCE(S):
(1) Airenne, S; Infect Immun 1999, V67, P1445 HCAPLUS
(2) Airenne, S; Infect Immun 1999, V67, P1445 HCAPLUS
(3) Black, C; Eur J Clin Microbiol Infect Dis 1994, V13, P752 HCAPLUS
(5) Campbell, L; J Clin Microbiol 1992, V30, P434 HCAPLUS
(8) Gaydos, C; Infect Immun 1996, V64, P1614 HCAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 10 OF 26 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 2000:457095 HCAPLUS
DOCUMENT NUMBER: 133:88218
TITLE: Chlamydia antigens and corresponding DNA fragments and uses thereof
INVENTOR(S): Murdin, Andrew D.; Oomen, Raymond P.; Wang, Joe
PATENT ASSIGNEE(S): Connaught Laboratories Ltd., Can.
SOURCE: PCT Int. Appl., 215 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2000039158 | A1 | 20000706 | WO 1999-CA1230 | 19991223 |

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU,

CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

EP 1140999 A1 20011010 EP 1999-962008 19991223

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO

PRIORITY APPLN. INFO.:

| | | |
|---|---|---|
| US 1998-113280 | P | 19981223 |
| US 1998-113281 | P | 19981223 |
| US 1998-113282 | P | 19981223 |
| US 1998-113283 | P | 19981223 |
| US 1998-113284 | P | 19981223 |
| US 1998-113285 | P | 19981223 |
| US 1998-113385 | P | 19981223 |
| US 1998-114050 | P | 19981228 |
| US 1998-114056 | P | 19981228 |
| US 1998-114057 | P | 19981228 |
| US 1998-114058 | P | 19981228 |
| US 1998-114059 | P | 19981228 |
| US 1998-114061 | P | 19981228 |
| WO 1999-CA1230 | W | 19991223 |

AB The present invention provides purified and isolated polynucleotide mols. that encode Chlamydia polypeptides which can be used in methods to prevent, treat, and diagnose Chlamydia infection. In one form of the invention, the polynucleotide mols. are selected from DNA that encode polypeptides CPN100686 RY 54 (SEQ ID Nos: 1 and 14), CPN100696 RY-55 (SEQ ID Nos: 2 and 15), CPN100709 RY-57 (SEQ ID Nos: 3 and 16), CPN100710 RY-58 (SEQ ID Nos: 4 and 17), CPN100711 RY-59 (SEQ ID Nos: 5 and 18), CPN100877 RY-61 (SEQ ID Nos: 6 and 19), CPN100325 RY-62 (SEQ ID Nos: 7 and 20), CPN100368 RY-63 (SEQ ID Nos:8 and 21), CPN100624 RY-64 (SEQ ID Nos:9 and 22), CPN100633 RY-65 (SEQ ID Nos:10 and 23), CPN100985 RY-66 (SEQ ID Nos:11 and 24), CPN100987 RY-67 (SEQ ID Nos:12 and 25) and CPN100988 RY-68 (SEQ ID Nos:13 and 26).

IT **281237-29-4 281237-32-9 281237-33-0**
RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
(amino acid sequence; **Chlamydia** antigens, corresponding DNA fragments, and use as vaccine or for diagnosis and therapy)

REFERENCE COUNT: 8

REFERENCE(S):
(1) Griffais, R; WO 9927105 A 1999 HCAPLUS
(3) Hitachi Chemical Co Ltd; EP 0784059 A 1997 HCAPLUS
(4) Kalman; NATURE GENETICS 1999, V21, P385 HCAPLUS
(5) Melgosa, M; INFECTION AND IMMUNITY 1991, V59(6), P2195 HCAPLUS
(6) Melgosa, M; INFECTION AND IMMUNITY 1994, V62(3), P880 HCAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 11 OF 26 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 2000:457094 HCAPLUS

DOCUMENT NUMBER: 133:88217
TITLE: Chlamydia antigens and corresponding DNA fragments and uses thereof
INVENTOR(S): Murdin, Andrew D.; Oomen, Raymond P.; Wang, Joe; Dunn, Pamela
PATENT ASSIGNEE(S): Connaught Laboratories Ltd., Can.
SOURCE: PCT Int. Appl., 81 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2000039157 | A1 | 20000706 | WO 1999-CA1224 | 19991222 |
| W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| EP 1140998 | A1 | 20011010 | EP 1999-960752 | 19991222 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO | | | | |

PRIORITY APPLN. INFO.:
US 1998-114060 P 19981228
US 1999-123967 P 19990312
US 1999-141271 P 19990630
WO 1999-CA1224 W 19991222

AB The present invention provides a method of **nucleic acid** , including DNA, immunization of a host, including humans, against disease caused by infection by a strain of Chlamydia , specifically C. pneumoniae , employing a vector contg. a nucleotide sequence encoding an ATP/ADP translocase of a strain of Chlamydia pneumoniae and a promoter to effect expression of the ATP/ADP translocase gene in the host. Modifications are possible within the scope of this invention.

REFERENCE COUNT: 6
REFERENCE(S):
(1) Griffais, R; WO 9927105 A 1999 HCAPLUS
(2) Hatch, T; JOURNAL OF BACTERIOLOGY 1982, V150(2), P662 HCAPLUS
(3) Kalman; NATURE GENETICS 1999, V21, P385 HCAPLUS
(4) Stephens; SCIENCE 1998, V282, P754 HCAPLUS
(5) Tjaden; J BACTERIOL 1999, V181(4), P1196 HCAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 12 OF 26 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 2000:441819 HCAPLUS
DOCUMENT NUMBER: 133:72938
TITLE: Chlamydia trachomatis antigens
INVENTOR(S): Ratti, Giulio
PATENT ASSIGNEE(S): Chiron S.p.A., Italy

SOURCE: PCT Int. Appl., 25 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2000037494 | A2 | 20000629 | WO 1999-IB2065 | 19991217 |
| WO 2000037494 | A3 | 20001012 | | |
| W: CA, JP, US | | | | |
| RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| EP 1140997 | A2 | 20011010 | EP 1999-958455 | 19991217 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI | | | | |

PRIORITY APPLN. INFO.: GB 1998-28000 A 19981218
WO 1999-IB2065 W 19991217

AB Proteins encoded by Chlamydia trachomatis which are immunogenic in humans as a consequence of infection have been identified using Western blots of two-dimensional electrophoretic maps. Several known immunogens were identified, as were proteins not previously known to be immunogens, and proteins not previously reported as expressed gene products.

L15 ANSWER 13 OF 26 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 2000:384432 HCAPLUS
DOCUMENT NUMBER: 133:29606
TITLE: A **Chlamydia pneumoniae** 98kDa **outer membrane protein** and gene sequences, and uses for immunization and diagnosis
INVENTOR(S): Murdin, Andrew D.; Oomen, Raymond P.; Wang, Joe; Dunn, Pamela
PATENT ASSIGNEE(S): Connaught Laboratories Limited, Can.
SOURCE: PCT Int. Appl., 98 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2000032784 | A1 | 20000608 | WO 1999-CA1148 | 19991201 |
| W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |

AU 2000037909 A5 20000619 AU 2000-37909 19991201
EP 1135501 A1 20010926 EP 1999-957786 19991201
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO
PRIORITY APPLN. INFO.: US 1998-110439 P 19981201
US 1999-132272 P 19990503
WO 1999-CA1148 W 19991201

AB The invention provides sequences of a **Chlamydia pneumoniae** 98kDa putative **outer membrane protein** (**OMP**) CPN100640 and corresponding DNA which can be used in methods to prevent, treat, and diagnose **Chlamydia** infections in mammals, including humans. In particular, a vaccine vector encoding **OMP** or an **OMP**/signal peptide fusion protein is provided as is its use in immunization against **Chlamydia**. Probes/primers and **antibodies** for diagnostic use are also provided. BALB/C mice vaccinated with an expression vector for **OMP** antigen showed increased resistance to challenge with C. **pneumoniae**.

IT **223704-49-2P 273949-20-5P**
RL: BOC (Biological occurrence); BPN (Biosynthetic preparation); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation); USES (Uses)
(amino acid sequence; **Chlamydia pneumoniae** 98kDa **outer membrane protein** and gene sequences, and uses for immunization and diagnosis)

IT **273949-18-1 273949-19-2**
RL: BOC (Biological occurrence); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); USES (Uses)
(nucleotide sequence; **Chlamydia pneumoniae** 98kDa **outer membrane protein** and gene sequences, and uses for immunization and diagnosis)

REFERENCE COUNT: 9
REFERENCE(S):
(1) Griffais, R; WO 9927105 A 1999 HCAPLUS
(2) Halme, S; IMMUNOLOGY 1997, V45(4), P378 HCAPLUS
(3) Hitachi Chemical Co Ltd; EP 0784059 A 1997 HCAPLUS
(6) Knudsen; INFECTION AND IMMUNITY 1999, V67(1), P375 HCAPLUS
(7) Madsen, A; WO 9858953 A 1998 HCAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 14 OF 26 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 2000:314718 HCAPLUS
DOCUMENT NUMBER: 132:333380
TITLE: Sequences of a **Chlamydia pneumoniae** 98kDa putative **outer membrane protein**, and uses thereof in diagnostic and therapeutic applications
INVENTOR(S): Murdin, Andrew David; Oomen, Raymond Peter; Dunn, Pamela Lesley
PATENT ASSIGNEE(S): Connaught Laboratories Limited, Can.
SOURCE: PCT Int. Appl., 93 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2000026237 | A2 | 20000511 | WO 1999-GB3579 | 19991029 |
| WO 2000026237 | A3 | 20000921 | | |

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

| | | | | |
|---|---|---|---|---|
| EP 1124849 | A2 | 20010822 | EP 1999-954095 | 19991029 |

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO

| | | | |
|---|---|---|---|
| PRIORITY APPLN. INFO.: | US 1998-106070 | P | 19981029 |
| | US 1999-122066 | P | 19990301 |
| | US 1999-428122 | A | 19991027 |
| | WO 1999-GB3579 | W | 19991029 |

AB The invention provides sequences of a **Chlamydia pneumoniae** 98kDa putative **outer membrane protein** (**OMP**) which can be used in methods to prevent, treat, and diagnose **Chlamydia** infections. In particular, a vaccine vector encoding **OMP** or an **OMP**/signal peptide fusion protein is provided as is its use in immunization against **Chlamydia**. Probes/primers for diagnostic use are also provided.

IT **268534-00-5P**
RL: BAC (Biological activity or effector, except adverse); BOC (Biological occurrence); BPN (Biosynthetic preparation); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation); USES (Uses)
(amino acid sequence; sequences of a **Chlamydia pneumoniae** 98kDa putative **outer membrane protein**, and uses thereof in diagnostic and therapeutic applications)

IT **268533-95-5**
RL: BOC (Biological occurrence); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); USES (Uses)
(nucleotide sequence; sequences of a **Chlamydia pneumoniae** 98kDa putative **outer membrane protein**, and uses thereof in diagnostic and therapeutic applications)

L15 ANSWER 15 OF 26 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 2000:291251 HCAPLUS
DOCUMENT NUMBER: 132:307251
TITLE: **Chlamydia pneumoniae** 98-kDa **outer membrane protein** and corresponding DNA and use for vaccine immunization
INVENTOR(S): Murdin, Andrew David; Oomen, Raymond Peter; Dunn,

Pamela Lesley
PATENT ASSIGNEE(S): Connaught Laboratories Limited, Can.
SOURCE: PCT Int. Appl., 101 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2000024902 | A1 | 20000504 | WO 1999-GB3571 | 19991028 |
| W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| AU 9963598 | A1 | 20000515 | AU 1999-63598 | 19991028 |
| EP 1124965 | A1 | 20010822 | EP 1999-951023 | 19991028 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO | | | | |

PRIORITY APPLN. INFO.:
US 1998-106046 P 19981028
US 1999-132271 P 19990503
US 1999-427533 A 19991026
WO 1999-GB3571 W 19991028

AB The present invention provides a method of **nucleic acid**, including DNA, immunization of a host, including humans, against disease caused by infection by a strain of **Chlamydia**, specifically C. **pneumoniae**, employing a vector, contg. a nucleotide sequence encoding a 98-kDa **outer membrane protein** of a strain of **Chlamydia pneumoniae** and a promoter to effect expression of the gene in the host. Modifications are possible within the scope of this invention.

IT **265294-96-0P**
RL: PRP (Properties); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(amino acid sequence; **Chlamydia pneumoniae** 98-kDa **outer membrane protein** and corresponding DNA and use for vaccine immunization)

IT **265294-95-9**
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(nucleotide sequence; **Chlamydia pneumoniae** 98-kDa **outer membrane protein** and corresponding DNA and use for vaccine immunization)

REFERENCE COUNT: 10
REFERENCE(S):
(2) Griffais, R; WO 9927105 A 1999 HCAPLUS
(3) Halme, S; SCANDINAVIAN JOURNAL OF IMMUNOLOGY 1997, V45(4), P378 HCAPLUS
(4) Hatichi Chemical Co Ltd; EP 0784059 A 1997 HCAPLUS

(6) Madsen, A; WO 9858953 A 1998 HCAPLUS
(9) Stephens, R; SCIENCE 1998, V282(5389), P754 HCAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 16 OF 26 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 2000:227773 HCAPLUS
DOCUMENT NUMBER: 132:250005
TITLE: Antigenic outer membrane protein OMP21 of Moraxella catarrhalis and the gene encoding it and their prophylactic, diagnostic and therapeutic uses
INVENTOR(S): Tucker, Kenneth; Tillmann, Ulrich F.
PATENT ASSIGNEE(S): Antex Biologics Inc., USA
SOURCE: PCT Int. Appl., 109 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2000018910 | A1 | 20000406 | WO 1999-US22918 | 19991001 |
| W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| AU 9964100 | A1 | 20000417 | AU 1999-64100 | 19991001 |
| EP 1117779 | A1 | 20010725 | EP 1999-951716 | 19991001 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO | | | | |

PRIORITY APPLN. INFO.: US 1998-164714 A 19981001
WO 1999-US22918 W 19991001

AB The invention discloses the Moraxella catarrhalis outer membrane protein polypeptide and polypeptides derived therefrom (collectively "OMP21"), nucleotide sequences encoding said OMP21, and **antibodies** that specifically bind OMP21. Also disclosed are pharmaceutical compns. including prophylactic or therapeutic compns., which may be immunogenic compns. including vaccines, comprising OMP21, **antibodies** thereto or nucleotides encoding same. The invention addnl. discloses methods of inducing an immune response to M. catarrhalis and OMP21 in an animal, preferably a human, methods of treating and methods of diagnosing Moraxella infections in an animal, preferably a human, and kits therefor. The outer membrane proteins of several strains of M. catarrhalis were extd. with non-denaturing detergents (octyl glucoside or EmpigenBB.RTM.) and fractionated on SDS-polyacrylamide gels followed by transfer to PVDF membranes for N-terminal sequencing. The protein was antigenic in rabbits and conserved between strains of M. catarrhalis and related bacteria. Antisera to the protein mediated complement killing of M. catarrhalis.

The gene, omp21, was cloned by PCR with degenerate primers and a knockout mutation created. The knockout strain showed weaker binding to cultured nasopharyngeal cells than did the wild type.

REFERENCE COUNT: 1
REFERENCE(S): (1) Harkness; WO 9612733 A1 1996 HCAPLUS

L15 ANSWER 17 OF 26 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 2000:98784 HCAPLUS
DOCUMENT NUMBER: 132:147637
TITLE: Protein and DNA sequences encoding a **Chlamydia pneumoniae outer membrane protein** (designated CPN100314), and uses thereof in vaccines and diagnostic assays
INVENTOR(S): Murdin, Andrew D.; Oomen, Raymond P.; Dunn, Pamela L.
PATENT ASSIGNEE(S): Connaught Laboratories Limited, Can.
SOURCE: PCT Int. Appl., 52 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2000006743 | A2 | 20000210 | WO 1999-IB1333 | 19990727 |
| WO 2000006743 | A3 | 20000504 | | |
| W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT | | | | |
| RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| AU 9947934 | A1 | 20000221 | AU 1999-47934 | 19990727 |
| EP 1108033 | A2 | 20010620 | EP 1999-931399 | 19990727 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI | | | | |

PRIORITY APPLN. INFO.:
US 1998-94203 P 19980727
US 1999-122045 P 19990301
US 1999-360434 A 19990726
WO 1999-IB1333 W 19990727

AB This invention provides protein and DNA sequences encoding a **Chlamydia pneumoniae outer membrane protein**, designated CPN100314. The invention also provides for the use of the disclosed protein/gene in vaccines against **Chlamydia**. Thus, the invention discloses a vector contg. a nucleotide sequence (gene **omp**) encoding CPN100314 operably linked to a promoter to effect expression of CPN100314 in the host. The invention also provides for the use of the CPN100314 protein/gene in diagnostic assays for **Chlamydia** infection.

IT **257598-92-8P 257598-93-9P**
RL: BOC (Biological occurrence); BPN (Biosynthetic preparation); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); OCCU

(Occurrence); PREP (Preparation); USES (Uses)
(amino acid sequence; protein and DNA sequences encoding a **Chlamydia pneumoniae outer membrane protein** (designated CPN100314), and uses thereof in vaccines and diagnostic assays)

IT **257598-91-7**
RL: BOC (Biological occurrence); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); USES (Uses)
(nucleotide sequence; protein and DNA sequences encoding a **Chlamydia pneumoniae outer membrane protein** (designated CPN100314), and uses thereof in vaccines and diagnostic assays)

L15 ANSWER 18 OF 26 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 2000:98781 HCAPLUS
DOCUMENT NUMBER: 132:147635
TITLE: Protein and DNA sequences encoding a **Chlamydia pneumoniae outer membrane protein** (designated CPN100501), and uses thereof in vaccines and diagnostic assays
INVENTOR(S): Murdin, Andrew D.; Oomen, Raymond P.; Dunn, Pamela L.
PATENT ASSIGNEE(S): Connaught Laboratories Limited, Can.
SOURCE: PCT Int. Appl., 55 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2000006741 | A1 | 20000210 | WO 1999-IB1330 | 19990727 |
| W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| AU 9947931 | A1 | 20000221 | AU 1999-47931 | 19990727 |
| EP 1100919 | A1 | 20010523 | EP 1999-931396 | 19990727 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO | | | | |

PRIORITY APPLN. INFO.:
US 1998-94192 P 19980727
US 1999-122044 P 19990301
US 1999-361440 A2 19990726
WO 1999-IB1330 W 19990727

AB This invention provides protein and DNA sequences encoding a **Chlamydia pneumoniae outer membrane protein**, designated CPN100501. The invention also provides for the use of the disclosed protein/gene in vaccines against **Chlamydia**. Thus, the invention discloses a vector contg. a

nucleotide sequence (gene mip) encoding CPN100501 operably linked to a promoter to effect expression of CPN100501 in the host. The invention also provides for the use of the CPN100501 protein/gene in diagnostic assays for **Chlamydia** infection.

IT **223705-65-5P 257598-95-1P**
RL: BOC (Biological occurrence); BPN (Biosynthetic preparation); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation); USES (Uses)
(amino acid sequence; protein and DNA sequences encoding a **Chlamydia pneumoniae outer membrane protein** (designated CPN100501), and uses thereof in vaccines and diagnostic assays)

IT **257598-94-0**
RL: BOC (Biological occurrence); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); USES (Uses)
(nucleotide sequence; protein and DNA sequences encoding a **Chlamydia pneumoniae outer membrane protein** (designated CPN100501), and uses thereof in vaccines and diagnostic assays)

REFERENCE COUNT: 7
REFERENCE(S):
(1) Griffais Remy; WO 9927105 A 1999 HCAPLUS
(2) Hitachi Chemical Co Ltd; EP 0784059 A 1997 HCAPLUS
(4) Kalman, S; NATURE GENETICS 1999, V21, P385 HCAPLUS
(5) Lundemose, A; MOLECULAR MICROBIOLOGY 1992, V6(17), P2539 HCAPLUS
(6) Melgosa, M; FEMS MICROBIOLOGY LETTERS 1993, V112, P199 HCAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 19 OF 26 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1999:244557 HCAPLUS
DOCUMENT NUMBER: 130:277672
TITLE: Chlamydia high-molecular-weight protein and its gene sequence and and diagnostic and therapeutic uses
INVENTOR(S): Jackson, James W.; Pace, John L.
PATENT ASSIGNEE(S): Antex Biologics Inc., USA
SOURCE: PCT Int. Appl., 141 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 9917741 | A1 | 19990415 | WO 1998-US20737 | 19981001 |

W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

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|---|---|---|---|---|---|
| AU 9895988 | A1 | 19990427 | AU 1998-95988 | | 19981001 |
| EP 1019028 | A1 | 20000719 | EP 1998-949723 | | 19981001 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI | | | | | |
| BR 9813841 | A | 20001003 | BR 1998-13841 | | 19981001 |
| ZA 9809012 | A | 19990412 | ZA 1998-9012 | | 19981002 |
| PRIORITY APPLN. INFO.: | | | US 1997-942596 | A | 19971002 |
| | | | WO 1998-US20737 | W | 19981001 |

AB A high-mol.-wt. (HMW) protein of Chlamydia, the amino acid sequence thereof, and **antibodies** that specifically bind the HMW protein are disclosed as well as the **nucleic acid** sequence encoding the same. The gene encoding HMW protein was cloned and sequenced from C. trachomatis strains L2, B, and F. The in vitro neutralization model shows that protective antiserum against HMW protein inhibits chalmydial infections of various tissue culture cell lines. Vaccine compns. comprising the HMW protein are effective in a mouse model of salpingitis and fertility. Thus, disclosed are prophylactic and therapeutic compns., comprising the HMW protein, a fragment thereof, or an **antibody** that specifically binds the HMW protein or a portion thereof, or the nucleotide sequence encoding the HMW protein or a fragment thereof, including vaccines.

REFERENCE COUNT: 4
REFERENCE(S):
(1) Caldwell; US 4427782 A 1984 HCAPLUS
(2) Daniels; US 5725863 A 1998 HCAPLUS
(3) Morrison; US 5071962 A 1991 HCAPLUS
(4) Urnovitz; US 5516638 A 1996 HCAPLUS

L15 ANSWER 20 OF 26 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1999:27851 HCAPLUS
DOCUMENT NUMBER: 130:92748
TITLE: **Outer membrane proteins** of **Chlamydia pneumoniae** and the genes encoding them and their diagnostic and therapeutic uses
INVENTOR(S): Birkelund, Svend; Christiansen, Gunna; Knudsen, Katrine; Madsen, Anna-Sofie; Mygind, Per
PATENT ASSIGNEE(S): Den.
SOURCE: PCT Int. Appl., 115 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 9858953 | A2 | 19981230 | WO 1998-DK266 | 19980619 |
| WO 9858953 | A3 | 19990318 | | |

W: AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, CZ, DE, DE, DK, DK, EE, EE, ES, FI, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG

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|---|---|---|---|---|
| AU 9880119 | A1 | 19990104 | AU 1998-80119 | 19980619 |
| EP 1007685 | A2 | 20000614 | EP 1998-928179 | 19980619 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI | | | | |
| BR 9810288 | A | 20000919 | BR 1998-10288 | 19980619 |
| PRIORITY APPLN. INFO.: | | | DK 1997-744 A | 19970623 |
| | | | WO 1998-DK266 W | 19980619 |

AB Members of a gene family from the human respiratory pathogen Chlamydia pneumoniae that encode surface exposed membrane proteins of a size of approx. 89-101 kDa and of 56-57 kDa, preferably about 89.6-100.3 kDa and about 56.1 kDa are cloned and characterized. The genes and gene products can be used in the diagnosis, pathol. and epidemiol. of C. pneumoniae and in vaccines. Genes were cloned by screening an expression library with antiserum to Chlamydia outer membrane complexes.

IT **219303-77-2 219303-79-4 219303-81-8**
**219303-84-1 219303-92-1 219304-14-0**
**219304-16-2 219304-18-4 219304-20-8**
**219304-22-0 219304-26-4**
RL: BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(amino acid sequence; **outer membrane proteins** of **Chlamydia pneumoniae** and genes encoding them and their diagnostic and therapeutic uses)

IT **219303-76-1 219303-78-3**, DNA (**Chlamydia pneumoniae** gene omp5) **219303-80-7 219303-83-0**, DNA (**Chlamydia pneumoniae** gene omp7) **219303-91-0**, DNA (**Chlamydia pneumoniae** gene omp8) **219304-12-8**, DNA (**Chlamydia pneumoniae** gene omp9) **219304-15-1**, DNA (**Chlamydia pneumoniae** gene omp10) **219304-17-3**, DNA (**Chlamydia pneumoniae** gene omp11) **219304-19-5**, DNA (**Chlamydia pneumoniae** gene omp12) **219304-21-9**, DNA (**Chlamydia pneumoniae** gene omp13) **219304-23-1**, DNA (**Chlamydia pneumoniae** gene omp14) **219304-27-5**, DNA (**Chlamydia pneumoniae** gene omp15) **219304-28-6**, DNA (**Chlamydia pneumoniae** gene omp15)
RL: BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(nucleotide sequence; **outer membrane proteins** of **Chlamydia pneumoniae** and genes encoding them and their diagnostic and therapeutic uses)

L15 ANSWER 21 OF 26 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1998:752291 HCAPLUS
DOCUMENT NUMBER: 130:10609
TITLE: Diagnosis and management of infection caused by Chlamydia
INVENTOR(S): Mitchell, William M.; Stratton, Charles W.
PATENT ASSIGNEE(S): Vanderbilt University, USA
SOURCE: PCT Int. Appl., 139 pp.

CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 9850074 | A2 | 19981112 | WO 1998-US9237 | 19980506 |
| WO 9850074 | A3 | 19990819 | | |
| W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| US 2001002421 | A1 | 20010531 | US 1998-25176 | 19980218 |
| US 6258532 | B1 | 20010710 | | |
| AU 9872899 | A1 | 19981127 | AU 1998-72899 | 19980506 |
| EP 981372 | A2 | 20000301 | EP 1998-920292 | 19980506 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI | | | | |

PRIORITY APPLN. INFO.:

| | | |
|---|---|---|
| US 1997-45689 | P | 19970506 |
| US 1997-45739 | P | 19970506 |
| US 1997-45779 | P | 19970506 |
| US 1997-45780 | P | 19970506 |
| US 1997-45784 | P | 19970506 |
| US 1997-45787 | P | 19970506 |
| US 1997-911593 | A | 19970814 |
| US 1998-25176 | A2 | 19980218 |
| US 1998-25521 | A2 | 19980218 |
| US 1998-25174 | A | 19980218 |
| WO 1998-US9237 | W | 19980506 |

AB A combination of agents directed toward various stages of the chlamydial life cycle is effective in substantially reducing infection. These include agents targeted against the cryptic phase (e.g. nitroarom. compds.), elementary body phase (e.g. disulfide reducing agents), and replicating phase, probenecid, and antiporphyric agents. **Chlamydia**-free cell lines and animals can be obtained, and **Chlamydia** infections can be treated, by use of .gtoreq.2 such agents. **Chlamydia** infections may be diagnosed or monitored by immunoassays (e.g. ELISA or antigen capture assay) for the cysteine-rich major **outer membrane protein** or for specific antigenic peptides, DNA amplification assays (e.g. PCR) for chlamydial genes, and Western blot assays. Thus, a multiple sclerosis patient showing progressive limb impairment was diagnosed with C. **pneumoniae** infection by cerebrospinal fluid PCR and culture; treatment with rifampin (300 mg twice a day for 2 mo against the elementary body/reticulate body transition), flagyl (500 mg twice a day for 5 mo against the stationary phase reticulate body), and ofloxacin (for 2 mo) and Bactrim (double strength twice a day) and levaquin (500 mg/day) for 5 mo against the replicating reticulate body resulted in marked

improvement in all aspects of neurol. function and an ability to return to work and routine athletic activities.

L15 ANSWER 22 OF 26 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1998:71227 HCAPLUS
DOCUMENT NUMBER: 128:137176
TITLE: Cloning and expression of major **outer membrane protein** gene of **Chlamydia** for immunization against infections
INVENTOR(S): Brunham, Robert C.
PATENT ASSIGNEE(S): University of Manitoba, Can.; Brunham, Robert C.
SOURCE: PCT Int. Appl., 42 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 9802546 | A2 | 19980122 | WO 1997-CA500 | 19970711 |
| WO 9802546 | A3 | 19980226 | | |
| W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| CA 2259595 | AA | 19980122 | CA 1997-2259595 | 19970711 |
| AU 9734314 | A1 | 19980209 | AU 1997-34314 | 19970711 |
| AU 723235 | B2 | 20000824 | | |
| EP 915978 | A2 | 19990519 | EP 1997-930277 | 19970711 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO | | | | |
| JP 2000503325 | T2 | 20000321 | JP 1998-505478 | 19970711 |

PRIORITY APPLN. INFO.: US 1996-21607 P 19960712
WO 1997-CA500 W 19970711

AB **Nucleic acids**, including DNA, immunization to generate a protective immune response in a host, including humans, to a major **outer membrane protein** of a strain of **Chlamydia** trachomatis, preferably contains a nucleotide sequence encoding a major **outer membrane protein** (MOMP) or a N-terminal MOMP fragment that generates **antibodies** that specifically react with MOMP and a promoter sequence operatively coupled to the first nucleotide sequence for expression of the MOMP in the host. Plasmid vectors such as pcDNA3 are prepd. which also contain gene regulatory elements such as the human cytomegalovirus promoter. The non-replicating vector may be formulated with a pharmaceutically-acceptable carrier for in vivo administration (intranasal) to the human host.

L15 ANSWER 23 OF 26 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1997:36422 HCAPLUS
DOCUMENT NUMBER: 126:70785
TITLE: Differentiation of Chlamydia psittaci and C. pecorum strains by species-specific PCR
AUTHOR(S): Sheehy, Noreen; Markey, Bryan; Gleeson, Mary; Quinn, P. Joseph
CORPORATE SOURCE: Department of Veterinary Microbiology and Parasitology, Faculty of Veterinary Medicine, University College Dublin, Dublin, 4, Ire.
SOURCE: J. Clin. Microbiol. (1996), 34(12), 3175-3179
CODEN: JCMIDW; ISSN: 0095-1137
PUBLISHER: American Society for Microbiology
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Sequence analyses of the 5' ends of the 60-kDa cysteine-rich **outer membrane protein** genes (Omp2) of **Chlamydia** psittaci and C. pecorum strains indicate that these species have .apprx.70% nucleotide identity. On the basis of this sequence information, PCR primers were designed to allow the specific amplification of DNA extd. from C. psittaci S26/3 (abortion strain), P94/1 (pigeon strain), and C. pecorum W73 (fecal strain) in one reaction tube. By using nested reactions (with primers PCR-D1 and PCR-D2 followed by the specific primers and PCR-D2), 0.6, 0.2, and 8 inclusion-forming units of S26/3, P94/1 (both dild. in tissue culture-neg. placental material), and W73 (dild. in culture-neg. fecal material) per mL, resp., were detected. The differentiation of C. psittaci and C. pecorum strains of ovine and bovine origins was carried out, and the results were in agreement with those obtained from AluI restriction enzyme anal. of DNA amplified from corresponding strains by PCR. This approach allows the simultaneous detection and typing of C. psittaci and C. pecorum strains and the identification of samples contg. both species.

L15 ANSWER 24 OF 26 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1995:743040 HCAPLUS
DOCUMENT NUMBER: 123:332083
TITLE: Single stranded DNA oligonucleotide and its application in a PCR method of diagnosis of Chlamydia trachomatis.
INVENTOR(S): Bebear, Christiane; Rzberg, Max
PATENT ASSIGNEE(S): Orgenics Ltd., Israel
SOURCE: Israeli, 25 pp.
CODEN: ISXXAQ
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| IL 94940 | A1 | 19950315 | IL 1990-94940 | 19900702 |

AB A single stranded DNA oligonucleotide consists of the 5' ATTTACGTGAGCAGCTCTCTCAT 3' designated as CT5. A method, for diagnosis of **Chlamydia** trachomatis, comprises obtaining a sample of **Chlamydia** trachomatis; hybridizing a first and second single

stranded DNA oligonucleotide according to claim 1 with the sample wherein the first single stranded DNA oligonucleotide comprises the sequence of claim 1 and wherein the second single stranded DNA oligonucleotide comprises a DNA sequence coding for a portion of the major **outer membrane protein** (MOMP), amplifying by an enzymic reaction the **Chlamydia** trachomatis DNA sequences which hybridize to the first and second single stranded oligonucleotide sequences and the region between them, and detecting the amplified DNA sequences. The first single stranded DNA oligonucleotide is the sequence 5' ATTTACGTGAGCAGCTCTCTCAT 3'. The second single stranded DNA comprises the sequence 5' GCCGCTTTGAGTTCTGCTTCCTC 3' designated CT1. Amplification by an enzymic reaction is performed by Taq1 DNA polymerase enzyme. The amplified DNA sequences are identified by gel electrophoresis and then hybridized with sulfonated DNA probes. A **monoclonal antibody** recognizing the labeled DNA was also obtained and used to visualize the DNA.

L15 ANSWER 25 OF 26 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1993:663642 HCAPLUS
DOCUMENT NUMBER: 119:263642
TITLE: A transcriptionally amplified DNA probe assay with ligatable probes and immunochemical detection
AUTHOR(S): Carpenter, William R.; Schutzbank, Ted E.; Tevere, Vincent J.; Tocyloski, Kenneth R.; Dattagupta, Nanibushan; Yeung, Kwok K.
CORPORATE SOURCE: Diagn. Div., Miles Inc., Tarrytown, NY, 10591, USA
SOURCE: Clin. Chem. (Washington, D. C.) (1993), 39(9), 1934-8
CODEN: CLCHAU; ISSN: 0009-9147
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Transcriptionally amplified DNA probes are valuable tools in the development of sensitive **nucleic acid**-based diagnostic assays. Here the authors describe a model assay using a novel oligonucleotide hairpin probe that encodes a T7 RNA polymerase promoter. The hairpin probe and an adjacently hybridizing biotinylated capture probe were hybridized to target DNA and the duplex was captured onto streptavidin-coated magnetic particles. After ligation of the immobilized probes, which served to maintain specificity, the hairpin probe was transcribed by T7 RNA polymerase. The amplified RNA product was hybridized to the capture probe and bound to the streptavidin-coated magnetic particles. The immobilized heteroduplex was detected with an **antibody**-alk. phosphatase conjugate specific for DNA:RNA hybrids, and the chemiluminescent substrate adamantyl-1,2-dioxetane Ph phosphate. Ten attomoles of target DNA could be detected in a background of 5 .mu.g of unrelated DNA. The chemiluminescent immunoassay was as sensitive as radioactive detection of specific product after gel electrophoresis.

L15 ANSWER 26 OF 26 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1987:552683 HCAPLUS
DOCUMENT NUMBER: 107:152683
TITLE: **Chlamydia** major **outer membrane protein**
INVENTOR(S): Agabian, Nina; Stephens, Richard; Kuo, Cho Chou; Mullenbach, Guy T.

PATENT ASSIGNEE(S): Chiron Corp., USA; University of Washington
SOURCE: Eur. Pat. Appl., 31 pp.
CODEN: EPXXDW

DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| EP 192033 | A2 | 19860827 | EP 1986-100279 | 19860110 |
| EP 192033 | A3 | 19880504 | | |
| EP 192033 | B1 | 19960925 | | |
| R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE | | | | |
| AT 143414 | E | 19961015 | AT 1986-100279 | 19860110 |
| US 5770714 | A | 19980623 | US 1995-466814 | 19950606 |
| US 5821055 | A | 19981013 | US 1995-468451 | 19950606 |
| US 6030799 | A | 20000229 | US 1995-466152 | 19950606 |
| PRIORITY APPLN. INFO.: | | | US 1985-692001 | 19850114 |
| | | | US 1986-818523 | 19860113 |
| | | | US 1991-691639 | 19910425 |
| | | | US 1993-144095 | 19931028 |

AB Polypeptide compns. having immunol. activity corresponding to that of a major outer membrane protein (MOMP) of C. trachomatis are produced by expressing a chimeric DNA construct encoding at least a portion of the MOMP under the control of a regulatory system recognized by a unicellular expression host. The polypeptides are useful as diagnostic agents and vaccines. Thus, partially digested chlamydial DNA was inserted into .lambda.gt11, the recombinant phage was cultivated in Escherichia coli, and colonies were screened with **monoclonal antibodies** for clones producing recombinant MOMP polypeptides. The amino acid sequence and corresponding DNA sequence for MOMP are presented.

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L1 510 SEA FILE=REGISTRY OUTER MEMBRANE PROTEIN?/CN
L2 30 SEA FILE=REGISTRY NUCLEIC ACID?/CN
L3 98 SEA FILE=REGISTRY ANTIBOD?/CN
L5 1 SEA FILE=REGISTRY ANTIBOD?(L)POLYCLONAL?
L6 521 SEA FILE=REGISTRY ("CHLAMYDIA TRACHOMATIC MAJOR OUTER MEMBRANE PROTEIN FRAGMENT"/CN OR "CHLAMYDIA TRACHOMATIS MJOR OUTER MEMBRANE PROTEIN HELPER T CELL EPITOPE"/CN) OR L1
L7 4972 SEA FILE=REGISTRY CHLAMYDIA(L)PNEUMONIAE NOT L6
L8 7910 SEA FILE=HCAPLUS L6 OR (OUTER(W)MEMBRANE?)(5A)PROTEIN? OR OMP
L9 25882 SEA FILE=HCAPLUS L7 OR CHLAMYDIA OR PNEUMONI?
L10 658 SEA FILE=HCAPLUS L8(L)L9
L11 621758 SEA FILE=HCAPLUS L5 OR ANTIBOD? OR L3 OR POLYCLONAL OR PAB# OR MAB# OR AB# OR MONOCLONAL
L13 309 SEA FILE=HCAPLUS L10 AND L11
L14 112454 SEA FILE=HCAPLUS NUCLEIC(W)ACID? OR L2
L15 26 SEA FILE=HCAPLUS L13 AND L14
L16 212985 SEA FILE=HCAPLUS (DIAG? OR THERAP? OR IDENT? OR DETN OR

DETECT? OR DETERM?)(L)SEQUENCE?
L18 41 SEA FILE=HCAPLUS (L13 AND L16) NOT L15
L19 27060 SEA FILE=HCAPLUS (DIAG? OR THERAP?)(L)SEQUENCE?
L20 13 SEA FILE=HCAPLUS L18 AND L19

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L20 ANSWER 1 OF 13 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 2001:581736 HCAPLUS
DOCUMENT NUMBER: 135:170779
TITLE: Porin B (PorB) as a therapeutic target for prevention and treatment of infection by Chlamydia
INVENTOR(S): Stephens, Richard S.; Kubo, Aya
PATENT ASSIGNEE(S): Regents of the University of California, USA
SOURCE: PCT Int. Appl., 54 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2001056605 | A1 | 20010809 | WO 2001-US3462 | 20010201 |

W: AU, CA, JP
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR

PRIORITY APPLN. INFO.: US 2000-179592 P 20000201

AB The present invention features the use of PorB polypeptide as a therapeutic agent. In specific embodiment the invention features a chlamydial vaccine based on a PorB polypeptide, as well as methods for induction of a protective immune response against infection by Chlamydia and Chlamydiophila. The invention further features methods for identifying agents that offset PorB function (e.g., in transport of .alpha.-ketoglutarate) and which are effective as anti-chlamydial chemotherapeutic agents.

IT **215108-09-1**
RL: PRP (Properties)
(unclaimed protein **sequence**; porin B (PorB) as a **therapeutic** target for prevention and treatment of infection by **Chlamydia**)

REFERENCE COUNT: 3
REFERENCE(S):
(1) Allen; J Immunol 1991, V147, P674 HCAPLUS
(2) Wyllie; FEBS Letters 1999, V445, P192 HCAPLUS
(3) Wyllie; Infection and Immunity 1998, V66(11), P5202 HCAPLUS

L20 ANSWER 2 OF 13 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 2000:842286 HCAPLUS
DOCUMENT NUMBER: 134:14041
TITLE: Protein and DNA **sequences** of Moraxella genes, BASB103, BASB104, BASB105, BASB106, BASB107 and BASB108, and their uses in **diagnosis** and

vaccination

INVENTOR(S): Thonnard, Joelle
PATENT ASSIGNEE(S): SmithKline Beecham Biologicals S.A., Belg.
SOURCE: PCT Int. Appl., 79 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2000071724 | A2 | 20001130 | WO 2000-EP4618 | 20000518 |
| WO 2000071724 | A3 | 20010215 | | |

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.:

| | | |
|---|---|---|
| GB 1999-12038 | A | 19990524 |
| GB 1999-12040 | A | 19990524 |
| GB 1999-12674 | A | 19990601 |
| GB 1999-12705 | A | 19990601 |
| GB 1999-12838 | A | 19990602 |
| GB 1999-13354 | A | 19990608 |

AB The invention provides protein and DNA **sequences** of Moraxella catarrhalis genes, BASB103, BASB104, BASB105, BASB106, BASB107 and BASB108 and their encoding proteins, and methods for producing such proteins by recombinant techniques. BASB104 of Moraxella catarrhalis is related by amino acid **sequence** homol. to Salmonella typhimurium **outer membrane protein** ApeE. BASB106 of Moraxella catarrhalis is related by amino acid **sequence** homol. to Klebsiella **pneumoniae** OmpK35 porin. BASB107 of Moraxella catarrhalis is related by amino acid **sequence** homol. to Escherichia coli FhuE receptor precursor. BASB108 of Moraxella catarrhalis is related by amino acid **sequence** homol. to Vibrio cholerae heme receptor hutA. BASB103 and BASB105 of Moraxella catarrhalis have some features of **outer membrane protein** : signal **sequence**, arom. amino acid N-terminal, high beta-strand 2D structure prediction. Also provided are **diagnostic**, prophylactic and **therapeutic** uses.

L20 ANSWER 3 OF 13 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 2000:688466 HCAPLUS
DOCUMENT NUMBER: 133:249334
TITLE: Methods and reagents for the diagnosis and treatment of multiple sclerosis caused by Chlamydia
INVENTOR(S): Stratton, Charles W.; Mitchell, William M.; Yao, Song-yi; Bannan, Jason D.; Ljunggren-Rose, Asa; Sriram, Subramaniam

PATENT ASSIGNEE(S): Vanderbilt University, USA
SOURCE: PCT Int. Appl., 102 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2000057187 | A2 | 20000928 | WO 2000-US7226 | 20000317 |
| WO 2000057187 | A3 | 20010419 | | |

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.:
US 1999-125598 P 19990319
US 2000-176662 P 20000118
US 2000-176784 P 20000118
US 2000-176940 P 20000118

AB The invention features methods and reagents for the diagnosis, monitoring, and treatment of multiple sclerosis. The invention is based in part on the discovery that Chlamydia is present in patients with multiple sclerosis, and that anti-chlamydial agents improve or sustain neurol. function in these patients.

L20 ANSWER 4 OF 13 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 2000:291072 HCAPLUS
DOCUMENT NUMBER: 132:307249
TITLE: Chlamydia antigens and corresponding DNA fragments and their uses for diagnosis and treatment of Chlamydia infection
INVENTOR(S): Murdin, Andrew D.; Oomen, Raymond P.; Wang, Joe
PATENT ASSIGNEE(S): Connaught Laboratories Limited, Can.
SOURCE: PCT Int. Appl., 226 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2000024765 | A2 | 20000504 | WO 1999-CA992 | 19991028 |
| WO 2000024765 | A3 | 20001109 | | |

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI,

SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM,
AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

EP 1129202 A2 20010905 EP 1999-955602 19991028
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO

PRIORITY APPLN. INFO.:

| | | |
|---|---|---|
| US 1998-106034 | P | 19981028 |
| US 1998-106039 | P | 19981028 |
| US 1998-106042 | P | 19981028 |
| US 1998-106044 | P | 19981028 |
| US 1998-106072 | P | 19981029 |
| US 1998-106073 | P | 19981029 |
| US 1998-106074 | P | 19981029 |
| US 1998-106087 | P | 19981029 |
| US 1998-106587 | P | 19981102 |
| US 1998-106588 | P | 19981102 |
| US 1998-106589 | P | 19981102 |
| US 1998-107034 | P | 19981102 |
| US 1998-107035 | P | 19981102 |
| WO 1999-CA992 | W | 19991028 |

AB The present invention provides purified and isolated polynucleotide mols. that encode 13 Chlamydia pneumoniae polypeptides which can be used in methods to prevent, treat, and **diagnose** Chlamydia infection. The nucleotide and deduced amino acid **sequences** of the 13 genes and proteins are provided.

IT **223708-70-1**
RL: BOC (Biological occurrence); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); USES (Uses)
(amino acid **sequence**; **Chlamydia** antigens and corresponding DNA fragments and their uses for **diagnosis** and treatment of **Chlamydia** infection)

L20 ANSWER 5 OF 13 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 2000:191222 HCAPLUS
DOCUMENT NUMBER: 132:232744
TITLE: BASB033 genes and proteins from Neisseria meningitidis and their use in diagnosis and for vaccination
INVENTOR(S): Ruelle, Jean-louis
PATENT ASSIGNEE(S): Smithkline Beecham Biologicals S.A., Belg.
SOURCE: PCT Int. Appl., 93 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2000015801 | A1 | 20000323 | WO 1999-EP6718 | 19990909 |

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU,
CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL,
IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD,

MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

| | | | | |
|---|---|---|---|---|
| AU 9958622 | A1 | 20000403 | AU 1999-58622 | 19990909 |
| EP 1112366 | A1 | 20010704 | EP 1999-946160 | 19990909 |

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO

PRIORITY APPLN. INFO.: GB 1998-20003 A 19980914
WO 1999-EP6718 W 19990909

AB The invention provides BASB033 proteins and genes and methods for producing such proteins by recombinant techniques. Also provided are **diagnostic**, prophylactic and **therapeutic** uses. The BASB033 protein from the ATCC13090 strain showed significant similarity (35% **identity** in a 292 amino acid overlap) with the Klebsiella **pneumoniae outer membrane** phospholipase A **protein**. The BASB033 protein for the H44/76 strain displayed .apprx.99% **sequence identity** with that of the ATCC13090 strain. The protein was produced with recombinant E. coli and used to immunize mice. Almost all N. meningitidis serogroup B strain tested reacted with the **antibodies** produced by these mice. Anti-BASB033 **antibodies** were found in sera of convalescent patients. The promoter region of the BASB033 gene was cloned and **sequenced**.

REFERENCE COUNT: 1
REFERENCE(S): (1) Inst Nat Sante Rech Med; WO 9802547 A 1998 HCAPLUS

L20 ANSWER 6 OF 13 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 2000:106618 HCAPLUS
DOCUMENT NUMBER: 132:165113
TITLE: Soluble fusion **protein** of **Chlamydia** trachomatis major **outer membrane protein** (MOMP) and hydrophilic portion of bovine serum albumin (BSA) and detection of **Chlamydia** trachomatis infection
INVENTOR(S): Shimizu, Hideharu; Ogawa, Hiroyuki; Kawaguchi, Hiroshi; Ishii, Yoshiyuki
PATENT ASSIGNEE(S): Denki Kagaku Kogyo K. K., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 37 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| JP 2000041678 | A2 | 20000215 | JP 1998-213212 | 19980728 |

AB Sol. fusion **protein** of **Chlamydia** trachomatis major **outer membrane protein** (MOMP) and hydrophilic portion of bovine serum albumin (BSA), usable as antigen for **Chlamydia** trachomatis infection diagnosis, their cDNAs, method of

their recombinant prodn., anti-**Chlamydia** trachomatis **antibody** detection methods, and reagent kits are provided. Fusion proteins were expressed in E. coli and sf9 cells. Using the recombinant fusion proteins as antigens, **Chlamydia** trachomatis infection was detected in serum samples of infants diagnosed with infant **Chlamydia pneumonia** by enzyme immunoassay (EIA), in both **antibody** capture and antigen solid phase methods.

L20 ANSWER 7 OF 13 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1999:34933 HCAPLUS
DOCUMENT NUMBER: 130:94474
TITLE: Chlamydia trachomatis specific peptides and their use in diagnostic assays
INVENTOR(S): Ohana, Bella
PATENT ASSIGNEE(S): Savyon Diagnostics Ltd., Israel
SOURCE: PCT Int. Appl., 78 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 9900414 | A1 | 19990107 | WO 1998-IL276 | 19980615 |
| W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| AU 9877861 | A1 | 19990119 | AU 1998-77861 | 19980615 |
| EP 991662 | A1 | 20000412 | EP 1998-925908 | 19980615 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI | | | | |

PRIORITY APPLN. INFO.: IL 1997-121115 19970619
WO 1998-IL276 19980615

AB Peptides or a mixt. of peptides derived from the variable domains of the **Chlamydia** trachomatis (C. trachomatis) immunodominant major **outer membrane protein** (MOMP), said peptides or mixts. of peptides characterized by having specificity only to C. trachomatis anti-MOMP **antibodies** and being non-cross reactive with anti-MOMP **antibodies** of other **Chlamydia** species. The peptides are selected from (a) peptide 4A having the amino acid sequence: IFDTTLNPTIAGAGDVK; (b) peptide 4B having the amino acid sequence: VDITTLNPTIAGCGSVAK; (c) peptide 4C having the amino acid sequence: CVFDVTTLNPTIAGAGDVK; (d) peptide 4D having the amino acid sequence: LAEAILDVTTLNPTITGKAVVSK; (e) peptide C.t2A having the amino acid sequence: CDNENQSTVK TSVPNMSLDQSK; (f) peptide C.t VDI having the amino acid sequence: VAGLENDPTTNVARA; (g) peptide C.t VDII having the amino acid sequence: DNENNATVSDSKLVPNHMSDQS; (i) peptide C.t VDIV having the amino acid sequence: LDVTTNATIAGKGTVV; and (i) analogs of any one of peptides

(a)-(h).
REFERENCE COUNT: 6
REFERENCE(S): (1) Hitachi Chemical Co Ltd; EP 0456524 A 1991 HCAPLUS
(2) Meiji Milk Prod Co Ltd; WO 9607910 A 1996 HCAPLUS
(3) United Biomedical Inc; WO 9511998 A 1995 HCAPLUS
(4) Us Dep Health & Human Service; NTIS Application Number US7324664 1989
(5) Us Health; WO 9406827 A 1994 HCAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 8 OF 13 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1999:9858 HCAPLUS
DOCUMENT NUMBER: 130:65242
TITLE: Chlamydia pneumoniae specific peptides and their use in diagnostic assays
INVENTOR(S): Ohana, Bella
PATENT ASSIGNEE(S): Savyon Diagnostics Ltd., Israel
SOURCE: PCT Int. Appl., 68 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 9857981 | A2 | 19981223 | WO 1998-IL277 | 19980615 |
| WO 9857981 | A3 | 19990311 | | |
| W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| IL 121114 | A1 | 20010319 | IL 1997-121114 | 19970619 |
| AU 9877862 | A1 | 19990104 | AU 1998-77862 | 19980615 |
| EP 1012182 | A2 | 20000628 | EP 1998-925909 | 19980615 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI | | | | |

PRIORITY APPLN. INFO.: IL 1997-121114 A 19970619
WO 1998-IL277 W 19980615

AB A peptide derived from the variable domain of C. **pneumoniae** major **outer membrane protein** (MOMP), for use in the diagnosis of C. **pneumoniae** infections, said peptide comprises between 9-40 amino acids and being able to react with **antibodies** formed during infection with C. **pneumonia**, further characterized by having essentially very low cross-reactivity towards **antibodies** against other **Chlamydia** species. Thus, peptides were synthesized and C. **pneumoniae**-specific peptides were selected for differentiating infections by C. **pneumoniae** from C. trachomatis, C. psittaci, and C. precorum.

L20 ANSWER 9 OF 13 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1998:586027 HCAPLUS
DOCUMENT NUMBER: 129:259405
TITLE: Recombinant preparation of **Chlamydia** trachomatis major **outer membrane proteins** and use for determination of **antibodies** to the proteins
INVENTOR(S): Ogawa, Hiroyuki; Ishii, Yoshiyuki; Shimizu, Hideharu
PATENT ASSIGNEE(S): Denki Kagaku Kogyo K. K., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 19 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| JP 10234395 | A2 | 19980908 | JP 1997-40780 | 19970225 |

AB The genes encoding major outer membrane protein (MOMP) of C. trachomatis serum type L2, C, G, D, and H are isolated and used for recombinant prepn. of the MOMP in transgenic cells such as Sf9 insect cells or Escherichia coli. Prepn. of the MOMP-immobilized microplate and highly-specific detection of C. trachomatis in patient sera using the microplate were shown. Methods and reagents contg. MOMP for detecting the **antibodies** to C. trachomatis are claimed.

L20 ANSWER 10 OF 13 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1995:121894 HCAPLUS
DOCUMENT NUMBER: 122:152496
TITLE: Ligase chain reaction to detect Chlamydia trachomatis infection of the cervix
AUTHOR(S): Schachter, Julius; Stamm, Walter E.; Quinn, Thomas C.; Andrews, William W.; Burczak, John D.; Lee, Helen H.
CORPORATE SOURCE: Department of Laboratory Medicine, University of California, San Francisco, CA, 94110, USA
SOURCE: J. Clin. Microbiol. (1994), 32(10), 2540-3
CODEN: JCMIDW; ISSN: 0095-1137
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The authors performed a multicenter evaluation of ligase chain reaction (LCR) in the **diagnosis** of **Chlamydia** trachomatis infection of the cervix. LCR provides an amplification of target **sequences** within the chlamydial cryptic plasmid. The LCR results were compared with those of isolation in cell culture. Discrepant (tissue culture-neg. and LCR-pos.) test results were resolved by the application of a direct immunofluorescent-**antibody** test to **detect** chlamydial elementary bodies and by the use of alternate DNA primers that targeted the chlamydial major **outer membrane protein** gene. A total of 234 of 2,132 specimens (10.9%) could be confirmed as contg. C. trachomatis. Of these, 152 were **detected** by isolation in cell culture and 221 were **detected** by LCR. The corresponding sensitivities were 94% for LCR and 65% for cell culture. There was greater variability among study site results for cell culture

sensitivity (52 to 92%) than for LCR sensitivity (87 to 98%). The specificity of each test was greater than 99.9%. Thus, LCR offers a highly sensitive nonculture method for **detecting** chlamydial infection of the cervix.

L20 ANSWER 11 OF 13 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1993:78806 HCAPLUS
DOCUMENT NUMBER: 118:78806
TITLE: Evaluation of the humoral immune response in trachoma to **Chlamydia** trachomatis major **outer membrane proteins** by sequence-defined immunoassay
AUTHOR(S): Jones, H. Martin; Schachter, Julius; Stephens, Richard S.
CORPORATE SOURCE: Dep. Pharm. Chem., Univ. California, San Francisco, CA, USA
SOURCE: J. Infect. Dis. (1992), 166(4), 915-19
CODEN: JIDIAQ; ISSN: 0022-1899
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The **Chlamydia** trachomatis immunodominant major **outer membrane protein** (MOMP) is both a target of neutralizing **antibodies** and the serotyping antigen and thus has been a focus of **diagnostic**, seroepidemiol., and exptl. investigations. The microimmunofluorescence (MIF) test has been the principal tool in serol. investigations of chlamydial infections but is difficult and expensive for routine use; moreover, since it uses whole organisms as antigen, it is incapable of revealing the mol. specificity of the humoral response to infection. These limitations were resolved by using synthetic peptides corresponding to serovar-specific antigenic regions of MOMP in an ELISA-based format to analyze the serospecificity of sera from trachoma cases. The ELISA reaction to the surface-exposed MOMP **sequence** variable segment 1 was immunodominant and serovar-specific and was in concordance with serovar specificity according to paired MIF test detns. Understanding the patterns of humoral responses to MOMP **determinants** in patient populations will advance knowledge of their role in the immunobiol. of naturally acquired infection.

L20 ANSWER 12 OF 13 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1991:599827 HCAPLUS
DOCUMENT NUMBER: 115:199827
TITLE: Genetic diversity and identification of human infection by amplification of the chlamydial 60-kilodalton cysteine-rich outer membrane protein gene
AUTHOR(S): Watson, M. W.; Lambden, P. R.; Clarke, I. N.
CORPORATE SOURCE: Med. Sch., Univ. Southampton, Southampton, SO9 4XY, UK
SOURCE: J. Clin. Microbiol. (1991), 29(6), 1188-93
CODEN: JCMIDW; ISSN: 0095-1137
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The 60-kDa cysteine-rich **outer membrane protein** (CrP) genes of **Chlamydia** psittaci, **Chlamydia pneumoniae**, and **Chlamydia**

trachomatis have very different 5' ends, but two area flanking this variable region show **abs. sequence** conservation. This observation permitted differentiation of the three species of **Chlamydia** by the polymerase chain reaction (PCR), forming the basis of a **diagnostic** test for chlamydial infections. The PCR product contg. the variable region of the resp. 60-kDa CrP genes was also subjected to restriction endonuclease digestion, enabling differentiation of individual type strains of C. psittaci. Differentiation was possible between lymphogranuloma venereum and trachoma isolates of C. trachomatis. The PCR-based **diagnostic** test was successful with all strains of chlamydiae studied. The PCR primers showed high specificity and did not product any product with common bacterial pathogens that may share the same sites of infection.

L20 ANSWER 13 OF 13 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1989:206783 HCAPLUS
DOCUMENT NUMBER: 110:206783
TITLE: Nucleotide and deduced amino acid sequences for the four variable domains of the major **outer membrane proteins** of the 15 **Chlamydia** trachomatis serovars
AUTHOR(S): Yuan, Ying; Zhang, Youxun; Watkins, Nancy G.; Caldwell, Harlan D.
CORPORATE SOURCE: Rocky Mountain Lab., Natl. Inst. Allergy Infect. Dis., Hamilton, MT, 59840, USA
SOURCE: Infect. Immun. (1989), 57(4), 1040-9
CODEN: INFIBR; ISSN: 0019-9567
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The amino acid **sequences** of major outer membrane proteins (MOMPs) from C. trachomatis serovars A, B, C, L1, and L2 are predominantly conserved but have four variable domains (VDs) in which major neutralizing and serotyping antigenic **determinants** are located. Because these MOMP VDs are primarily responsible for antigenic differences between serovars and are assocd. with important immunol. and biol. properties, studies were focused on defining these **sequences** within the MOMPs of all 15 C. trachomatis serovars. Oligonucleotide primer extension sequencing of MOMP mRNA was used to det. the nucleotide and deduced amino acid **sequences** of the four MOMP VDs of the 15 C. trachomatis serovars. Comparative amino acid **sequence** homologies of all four domains sepd. the serovars into three groups: group 1, serovars B, Ba, D, E, L1, and L2; group 2, serovars G and F; and group 3, serovars A, C, H, I, J, K, and L3. Hydrophilicity and charge values for each domain were detd. The MOMP VDs of given serovars with the greatest total hydrophilicity and charge values were found to be the location of antigenic **determinants** recognized by MOMP-specific **monoclonal antibodies**. These findings should be useful for predicting MOMP antigenic **determinants** and testing the antigenic properties of these VDs by using synthetic peptides corresponding to each MOMP VD. The potential usefulness of the VD **sequence** information is discussed in relation to the development of defined synthetic peptides and oligonucleotides that may be used to develop new serol. and **diagnostic** assays for C. trachomatis infections.